

Appl. No. 09/972,157

Amtd. Dated February 24, 2005

Reply to Office Action of November 29, 2004

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the above-identified application:

Claim 1 (currently amended): A method for geographically referencing an improvement image comprising the steps of:

extracting image positions of at least two image reference points, the reference points depicting features that each have a known geographic position,
interpreting geographic positions for the features,
computing a geographic distance between the features,
determining a geographic direction between the features,
computing an image distance between the features, and
obtaining determining an improvement image scale factor of the image based on the computed geographic distance between the features and the computed image distance between the features.

Claim 2 (original): The method of claim 1, further comprising the step of displaying said improvement image.

Claim 3 (original): The method of claim 1, further comprising the step of marking at least two reference points on the improvement image with information indicating geographic position.

Claim 4 (original): The method of claim 1, further comprising the step of determining an image position for each of the reference points.

Claim 5 (original): The method of claim 1, further comprising the step of determining an image direction between the reference points.

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Claim 6 (original): The method of claim 1, further comprising the step of determining an improvement image reference translation.

Claim 7 (original): The method of claim 1, further comprising the step of determining an improvement image rotation angle.

Claim 8 (canceled).

Claim 9 (original): The method of claim 1, further comprising the step of expressing the geographic positions in latitude and longitude.

Claim 10 (original): The method of claim 1, further comprising the step of expressing the geographic distance in nautical miles.

Claim 11 (currently amended): A method for converting an improvement image to a geographically referenced image comprising the steps of:

extracting image positions of at least two image reference points, the reference points depicting features that each have a known geographic position,

interpreting a geographic position for each of the features,

computing a geographic distance between the features,

determining a geographic direction between the features,

computing an image distance between the features, and

obtaining determining an improvement image scale factor of the image based on the computed geographic distance between the features and the computed image distance between the features.

Claim 12 (original): The method of claim 11, further comprising the step of displaying said geographically referenced image.

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Claim 13 (original): The method of claim 11, further comprising the step of marking at least two points on the improvement image with information indicating a geographic position for each of the reference points.

Claim 14 (original): The method of claim 11, further comprising the step of determining an image position for each of the reference points.

Claim 15 (original): The method of claim 11, further comprising the step of determining an image direction between the reference points.

Claim 16 (original): The method of claim 11, further comprising the step of determining an improvement image reference translation.

Claim 17 (original): The method of claim 16, further comprising the step of translating the improvement image in accordance with the reference translation.

Claim 18 (original): The method of claim 11, further comprising the step of determining an improvement image rotation angle.

Claim 19 (original): The method of claim 18, further comprising the step of rotating the improvement image in an amount sufficient to compensate for the rotation angle.

Claim 20 (canceled).

Claim 21 (currently amended): The method of claim [20] 11, further comprising the step of scaling the improvement image in an amount sufficient to compensate for the scale factor.

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Claim 22 (currently amended): A method for combining an improvement image with geographically referenced information to produce a composite image, the method comprising the steps of:

- extracting an image position for each of at least two image reference points, the reference points depicting features that each have a known geographic position,
- interpreting a geographic position for each of the features,
- computing a geographic distance between the features,
- determining a geographic direction between the features,
- ~~obtaining~~ determining an improvement image scale factor of the image based on the computed geographic distance between the features and the computed image distance between the features,
- determining an improvement image reference translation,
- determining an improvement image rotation angle,
- ~~determining an~~ scaling the image based on the determined improvement image scale factor, and
- creating an output.

Claim 23 (original): The method of claim 22, further comprising the step of displaying said composite image.

Claim 24 (original): The method of claim 22, the output containing the improvement image reference translation.

Claim 25 (original): The method of claim 22, the output containing the improvement image rotation angle.

Claim 26 (canceled).

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Claim 27 (original): The method of claim 22, further comprising the step of creating a composite image based on said output.

Claim 28 (currently amended): A system for geographically referencing an improvement image, the system comprising a memory storage device in communication with a processor, the memory storage device configured to store an improvement image, the processor configured to perform the steps of:

extracting an image position for each of at least two image reference points, the reference points depicting features that each have a known geographic position,
interpreting a geographic position for each of the features,
computing a geographic distance between the features,
determining a geographic direction between the features,
computing an image distance between the features, and
obtaining determining an improvement image scale factor of the image based on the computed geographic distance between the features and the computed image distance between the features.

Claim 29 (currently amended): A system for converting an improvement image to a geographically referenced image, the system comprising a memory storage device in communication with a processor, the memory storage device configured to store an improvement image, the processor configured to perform the steps of:

extracting an image position for each of at least two image reference points, the reference points depicting features that each have a known geographic position,
interpreting a geographic position for each of the features,
computing a geographic distance between the features,
determining a geographic direction between the features,
computing an image distance between the features, and
obtaining determining an improvement image scale factor of the image based on the computed geographic distance between the features and the computed image distance

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between the features.

Claim 30 (currently amended): A system for combining an improvement image with geographically referenced information, the system comprising a memory storage device in communication with a processor, the memory storage device configured to store the improvement image and the geographically referenced information, the processor configured to perform the steps of:

extracting an image position for each of at least two image reference points, the reference points depicting features that each have a known geographic position,

interpreting a geographic position for each of the features,

computing a geographic distance between the features,

determining a geographic direction between the features,

computing an image distance between the features,

determining an improvement image scale factor based on the computed geographic distance between the features and the computed image distance between the features,

determining an improvement image reference translation,

determining an improvement image rotation angle,

determining an scaling the image based on the determined improvement image scale factor, and

creating an output.